Willingness to Pay for a Contraceptive Health Insurance Benefit:

A Survey of Washington State Citizens

Report to the Washington State Office of the Insurance Commissioner (OIC),

Consumer Survey Component of the Women's Health Benefits Study

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EXECUTIVE SUMMARY

Introduction

In Washington State and nationally there has been considerable public and legislative debate about coverage of contraceptive services in health insurance plans. The Office of the Insurance Commissioner (OIC) set out to: 1) determine how such an insurance benefit is valued by Washington State citizens and 2) document contraceptive method use and insurance coverage, by surveying a random population sample. Half of Washington health insurance plans did not cover any contraceptive method in 1998. Contraceptives have a direct use value for those individuals who want to prevent unwanted and mistimed pregnancies. Such a benefit also may have social altruism value to anyone who pays into a health plan, regardless of that person's personal use of contraceptives.

Methods

We conducted a survey of opinion regarding availability of, and willingness to pay (WTP) for, a contraceptive health insurance benefit. The population-based random sample was a statewide random digit dial (RDD) telephone survey of 149 men and 182 women (n = 331) ages 18 years or older. RDD is a sound methodology for obtaining a statistically representative sample. The contingent valuation method was used to determine maximum WTP for a contraceptive insurance benefit, using a bidding game format. To check the validity of the WTP responses we tested for starting point bias and for the impact of price unit framing and presentation of different contraceptive effectiveness scenarios. To test theoretical validity we conducted multivariate regression analysis of WTP against income, gender, and age.

Results

Eighty-seven percent of respondents who expressed an opinion said that they thought contraceptives should be covered by insurance plans. Multivariate logistic regression showed that women were over five and a half times more likely to support insurance coverage than were men (adjusted odds ratio 5.6, 95% CI 2.4-13.4), after adjusting for income, employer, reproductive age and insurance source. Those who were unemployed were more likely to support coverage (p = 0.04) than those who were employed by someone else. Individuals of reproductive age – defined as women $\leq$ 45 years and men $\leq$ 55 years – were more likely to support such coverage compared to those individuals older than reproductive age (adjusted odds ratio 3.1, 95% CI 1.1-8.8).

All respondents were asked the amount that they would be willing to pay in higher insurance premiums for a contraceptive benefit. The unadjusted mean WTP was $8.79 per month, more than four and one-half times the actuarial cost ($1.93/month) for adding such a benefit. Nearly all respondents (96.4%) were willing to pay more than the actuarial cost on an annual basis.

The unadjusted mean WTP was higher among individuals who were told that contraceptives could be as high as 99% effective in preventing pregnancy, versus contraceptives that could be 88% effective ($p = 0.048$). There was no statistically significant effect of unit price framing (month vs. year WTP, two-sided sign test $p = 0.11$). Some starting point bias was seen. Persons with a $2 bid start had a mean WTP of $6.62, while those with a $10 start had mean WTP of $11.28. This suggests, however, that WTP responses converge in a fairly limited range of $6 to $11, which is well above the actuarial cost of approximately $2 per plan enrollee per month.

Multivariate tobit regression analysis showed that maximum WTP differed significantly by gender, age, and starting point of the WTP bid. To equalize the variance at different levels of the WTP outcome, we analyzed the log transformed WTP. Therefore, our analysis is of the relative, rather than the absolute, difference between two WTP figures. Women were willing to pay 27% more per month than men ($p = 0.001$). As expected, reproductive-aged respondents were willing to pay more than those who were older than reproductive age (33% higher mean WTP, $p \leq 0.000$).

Most individuals (95.2%) surveyed had some form of public or private health insurance coverage. Fewer than one-fourth (23.7%) of those respondents not on Medicare who knew their health insurance plan policy said that their insurance covered contraceptives. If all the non-Medicare individuals who answered "do not know" were in plans that covered contraceptives, 'best case' coverage levels would be 54 percent; if all were in plans that do not cover, 'worst case' total coverage would be 24 percent. Contraceptive coverage differed by insurance source (χ^2 $p = 0.032$). Whether they had insurance or not, around one in ten respondents said that they paid out-of-pocket for their contraception.

More than two-thirds of the respondents (67.6%) were using at least one contraceptive/safer sex method. This level of method use did not statistically differ by gender: 70 percent of men and 66 percent of women stated that they currently used contraception (χ^2 $p = 0.39$).

Approximately one in fourteen respondents (6.6%) indicated that they had changed their contraceptive method or use due to concern about cost. These individuals did not differ from the overall study population, but were paying more in out-of-pocket monthly contraceptive costs ($11.25/month vs. $8.23, respectively).

Summary

In this population-based sample strong support was found for a contraceptive health insurance benefit. People are willing to pay $8.79 per month in higher premiums or reduced benefits for other possible insurance-covered services. The benefit-to-cost ratio for contraceptive health insurance coverage is high at 4.6. Strengths of this study include representative sampling – these data represent broad-based constituent values. Contraceptive coverage in health insurance plans appears to be highly valued by Washington State citizens.

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INTRODUCTION

In Washington State and throughout the nation there has been public debate about whether contractive goods and services should be a covered benefit in commercial health insurance plans. This study set out to estimate the benefit of contraceptive coverage to citizens of Washington, and to describe the current level of contraceptive use and coverage in health insurance plans. This survey used rigorous methods – an economic methodology called contingent valuation – to gauge 'willingness to pay' (WTP) as a measure of how individuals value contraceptive coverage in health plans. Respondents were sampled randomly throughout the state, thus representing population-based opinions, values, and descriptions of current contraceptive coverage and method use. Establishing the mean WTP for a good or service allows comparison of this benefit to that good's cost in the form of a benefit-cost ratio. This information regarding the value of contraceptive coverage in health insurance plans may be useful to legislators, policymakers, business and community leaders throughout the state.

Contraceptive Coverage Debate / Policy Context

Private health insurance plans often exclude some and many exclude all types of contraceptives and safer sex methods.[1] Relevant contraceptive methods include the five FDA-approved methods for women (oral contraceptives, diaphragm, IUD, Norplant, Depo Provera), male and female condoms,[a] and sterilization. The majority of women rely on employer-related health insurance.[2] Yet historically contraceptive and STD prevention method coverage in private and employer-sponsored commercial insurance plans has been unavailable.[3,4] Individuals are more likely to access essential reproductive and sexual health services[5] when they have some form of financial coverage[6] from a private or public health insurance payment source.

In part because the health insurance market has not been consistent in offering contraceptive benefits, 20 states have enacted legislation for comprehensive or limited insurance coverage. A contraceptive benefit is now provided to government employees and their dependents who are covered under the Federal Employees Health Benefits Program.[7] Bills mandating such coverage have been introduced in the United States Congress and in the Olympia Statehouse. A recent Federal Court decision (*Erickson v. Bartell Drug Company*) ruled that excluding contraceptives from a health plan that otherwise covers prescription drugs constitutes sex discrimination.

Study Rationale

The Office of the Insurance Commissioner's 1998 Reproductive Health Benefits Survey established that there was a substantial lack of commercial insurance coverage for contraceptive services. Half of the 91 top-selling plans did not cover any kind of contraceptive, and only 30 percent covered all five Food and Drug Administration (FDA)-approved methods.[8] Given recent

[a] Very few plans cover the cost of (male) condoms, though this is the most effective sexually transmitted disease prevention method currently available.

public policy debate over contraceptive coverage, this study set out to establish what a representative sample of Washington men and women would be willing to pay in terms of insurance premiums to have a contraceptive benefit.

Contraceptive Cost-Effectiveness

Seventy-seven percent (over 46 million) of women ages 15 to 44 years in the U.S. are at risk of unintended pregnancy,[9] and around one-third (17 million women) are at risk for sexually transmitted disease (STDs).[10] It is known that seven percent of these women at risk for pregnancy do not use contraceptives, and they account for around half of all unplanned pregnancies[11] (47% in 2000, whereas the 93% of at-risk women using contraception accounted for 53% of all unintended pregnancies[12]). The unintended pregnancy proportion in Washington State is slightly higher than the national average: 55 percent of all pregnancies 1993 - 1994.[13]

Lowering the considerable costs of unwanted pregnancies contributes to overall societal good.[14] Six dollars in state funds are saved by every dollar spent on family planning clinics in Washington State;[15] other estimates of public savings range from two dollars to $89 for every dollar spent on family planning.[16] Contraceptive methods including emergency contraception[17] have been shown to be cost-effective[18,19] in reducing the costs associated with unwanted and mistimed pregnancies. An analysis of fifteen different contraceptive methods found that all methods were cost-savings at five years compared with using no method. Over five years, these methods saved from $8,933 to $14,122 by preventing an average of four unintended pregnancies.[20]

Benefits of Contraceptive Coverage

Although nationally public opinion appears to favor requiring insurers to provide contraceptives as part of prescription coverage even if this raises premium costs,[21] in the current fiscal climate it is important that the established benefit be greater than actual cost.

Benefit is measured by the demand curve for contraceptives. The demand curve simply represents the negative or inverse relationship between price and quantity. All other things being equal, the demand curve shows how the quantity of a good or service demanded responds to different prices. If the price of contraceptives falls, by economic theory we would expect people to buy more of them. Other variables may cause the demand curve to shift, such as income, the price of substitute methods, the quality or effectiveness of contraceptive methods. For normal goods, an increase in income causes the entire demand curve to shift to the right so that a higher income person would buy more of a good than a lower income person at the same price. Policy research generally focuses on the effects of prices as policy tools that can be changed, and on income to assess the equity effects of policies.

For contraceptives as well as other health care services, price differences are often reflected in the presence or lack of insurance coverage, because insurance coverage lowers the out-of-pocket price to consumers. Some studies of the relationship of price and demand for contraceptives have been conducted in the context of changes in benefit coverage. For example, Arizona's Medicaid system did not provide contraceptive services in 1984 but had added them by 1989; low-income

women were 2.3 times more likely to receive these services in 1989 than in 1984.[22] When Colorado's Medicaid program added Norplant coverage late in 1991, a cohort analysis of women giving birth in 1991 and 1992 found that there was a 25 percent drop in the rate of repeat births in 1992, attributed to the subsidized availability of this additional contraceptive method.[23] In California, the Medicaid program found that covering the cost of more effective birth control methods led to high rates of women switching from no method or less effective methods, to more effective methods.[24]

Considering income, available evidence shows that the demand of contraceptives is more elastic for lower income people than for higher income people. 'Elasticity' refers to the extent to which people buy more or less of a good as the price goes down or up.[a] This is true for most products, because at a given price and slope, the demand curve will be more elastic at smaller quantities demanded. In the specific case of contraceptives, demand is finite. Once a couple has achieved a certain amount of protection, there is no reason to spend more money on contraceptives. This is in contrast to housing or vacations, for example, for which people will always want to spend more if they have higher income.

What is known about how people value contraception? Existing empirical studies of demand for contraceptives are limited as a measure of benefits of contraceptives. First, willingness to pay (WTP) among people using contraceptives may exceed the market price, but all that is observed is the price paid. People are clearly better off paying a market price that is below their WTP, but price paid is not ideal for measuring benefit. Additionally, as the health economist Gafni has pointed out,[25] WTP extends beyond current users of contraceptives. According to his framework, even people who are not currently using contraceptives benefit from "the option value" of insurance coverage. For example, a woman who is currently pregnant would benefit from knowing that contraceptive coverage will be available to her in the future when she and her partner have completed building their family. There may also be an additional social benefit to contraceptive coverage. This would be the value people have for living in a society that gives people more control over their reproductive decisions, and could accrue to anyone in the society, even people who are older than reproductive age.

We hypothesized that there are two-levels of value of a contraceptive insurance benefit: full value and social value. The 'full' value includes current, option, and social value and is reflected in the WTP of persons of reproductive age (defined in our study as women younger than 45 years old and men younger than 55 years old) who wish to plan or prevent pregnancies. 'Social ' value is reflected in the WTP of people older than reproductive age. It is the amount that individuals in a health plan would be willing to pay for a benefit they themselves will not use, but which they see as being beneficial for the individual and collective health of all enrollees in the plan (and at the macro level, society).

To capture the full benefit of contraceptive coverage, we conducted a contingent valuation (CV) survey. CV relies on survey data of people's stated willingness to pay, rather than on an observed price paid. The main advantage of this methodology is that it captures the full benefit, as described above. The disadvantage is concern that people's responses may not reflect their true

[a] The price elasticity of demand is the percentage change in the quantity demanded divided by the percentage change in price (Ruffin & Gregory, 1997).

WTP. To address this concern, our research has built on previous experience to minimize strategic bias (see below) in CV studies and to test the validity of survey participants' responses.

Contingent Valuation Method

Contingent valuation has been extensively used in healthcare applications to estimate the benefits of a wide range[26] of programs including insurance coverage of infertility treatment, flu vaccines, cardiac symptom reduction, cancer treatment, child survival,[27] antenatal screening, and community-based cardiovascular and drug abuse treatment programs.

It has been argued that WTP for health care programs should be best assessed from an insurance perspective using a general-population sample,[28] which was the design for this study.

CV Bidding Format

A 'bidding algorithm' was used to ascertain the maximum value participants attach to contraceptive coverage. This approach has been used to evaluate proposed health insurance coverage of infertility treatment,[29] among others. The 'bid' questions were asked as a stepped series of closed-ended dichotomous choices, which has the advantage of yes/no shopping decision-familiarity.[30] For example, half the participants' questions started with "Would you be willing to pay two dollars each month in insurance premiums to have the cost of all available contraceptives covered by the health plan?" If the answer was 'yes', the next question would ask whether they would be willing to pay four dollars per month. If the answer was 'no', they would next be asked whether they would be willing to pay one dollar each month, and so on. When people indicated 'no' to a given bid level, they were then asked what was the maximum amount that they would be willing to pay (open-ended).

Minimizing Strategic Bias

Strategic bias refers to the potential for a respondent to willfully misrepresent his/her WTP. For example, when a respondent has always received free contraceptives from a public clinic and believes that the government will continue to provide those services, under some circumstances he/she may say that his/her WTP is much lower that the true WTP in order to discourage the government from introducing a user fee program. If that respondent believed that his/her access to contraceptives was in jeopardy, the response would be closer to the true WTP. Or when a respondent would like to see a contraceptive benefit introduced and believes that a premium increase is a predetermined, fixed amount, under some circumstances he/she may say that his/her WTP is much higher than the true WTP to encourage the government to provide the service. If the respondent believed that he/she would have to pay the amount stated in his/her response, the answer would be closer to the true WTP.

Strategic bias is minimized when the respondent understands two conditions: 1) his/her WTP has an impact on whether or not the health service will be provided; 2) his/her response to the WTP question is the amount he/she will actually have to pay.[31] The WTP questions for our survey were carefully designed to convey these two conditions. The introduction explained to participants how the survey responses could influence policy decisions about contraceptive

coverage: "The results of this survey will be presented to the State Legislature in the next few months. The opinions of this sample of citizens may influence how the contraceptive benefits issue is debated in Olympia, even though this is not an official vote." (See Appendix A for the full text of the questionnaire.) The preface to the WTP question explained how a person might actually pay for contraceptive coverage: "As you know, everyone is concerned about the cost of health care these days, and policymakers only want to support benefits citizens truly value. Therefore, I would like to ask you for a dollar amount that you would be willing to pay for the contraceptive benefit that covers all FDA-approved methods. In reality, payment for such a benefit might be in the form of not getting other medical services or employee benefits."

Test for Theoretical Validity

Several additional steps were taken to test the validity of the WTP responses by examining whether WTP varies by factors an economic model would consider important such as income[32] and age.

Validity Checks

Starting point bias. First we looked for evidence of start point bias (i.e., differences in maximum WTP for those offered higher or lower initial 'bids.' Two different algorithms were used to assess starting point bias. Half the surveys started the WTP choices at the approximately $24 per employee per year cost that has been actuarially determined for coverage of the full range of reversible medical contraceptives ($21.40 in 1998, applying 4% inflation to yield a monthly cost of $1.93 in year 2000 dollars).[33] This two-dollar/month figure thus also served as a referendum question on the expected cost of a contraceptive benefit. The other half of the surveys started the bidding algorithm at ten dollars to see if the final mean maximum WTP amount varied. A follow-up question was asked of all those who answered '$0' to assess "protest" responses[34] (see Appendix C, Q3).

Unit framing bias. We also examined whether there was evidence of unit price framing bias, i.e., different 'monthly' versus 'yearly' maximum WTP within individuals. After determining the maximum monthly WTP figure, respondents were then asked if they would pay this amount times twelve for a yearly expenditure. This was done to assess whether framing the benefit cost in different time units would affect the maximum WTP amount.

Effectiveness. Finally, we evaluated whether there was an increased WTP among those offered a more effective contraceptive efficacy scenario. A critique of WTP is that it forces people to make calculations based on fairly small changes in risk.[35] This problem was minimized in our survey since the use of contraception so dramatically lowers the risk of pregnancy. Two different probabilities of pregnancy reduction scenarios were given. From a baseline 85 percent chance of pregnancy in a year of sexual intercourse without contraception, one percent and 12 percent pregnancy rate scenarios were randomly varied between callers. These rates were based on the following derivations of contraceptive method failure events: a) surgical methods [sterilization] and hormonal methods [pills, DPMA, Norplant] average pregnancy probability of 0.3 percent, and b) barrier methods [diaphragm, male and female condom] probability of 12.0 percent.[36]

According to economic theory, WTP should rise with expected increase in benefit[37] of greater pregnancy risk reduction.

SURVEY METHODS

Random Digit Dial

A random digit dial (RDD) telephone survey was conducted among household respondents 18 years of age or older. The telephone data collection was conducted by Gilmore Research Group, Seattle, Wash., from Nov. 29 to Dec. 18, 2000. A total of 331 respondents were interviewed. The random digit sample was purchased from Genesys Sampling Systems, a nationally recognized source for telephone samples, using a list-assisted approach of phone banks with at least one listed residential number and no pre-screening for business numbers. This approach provides up to 97 percent coverage of the general population nationally; in Seattle it has been found to exclude about 5.4 percent of available residential phone numbers.[38] The RDD sample was randomly generated in proportion to the population of Washington State. Having a randomly generated sample minimizes the possibility that the respondents will be skewed toward households with listed telephone numbers, and ensures inclusion of households that have recently moved.

The average survey was about eight minutes in length. The data were collected by computer-assisted telephone interviewing (CATI). Phone calls were made at different times of day and early evenings, on weekdays and weekends. Up to ten calls were made to numbers in order to ascertain eligibility and complete an interview where possible. Of all working numbers called, 480/809 (59.3%) qualified as eligible for participation. Of those eligible, 331/480 (68.9%) resulted in a completed survey. Refusals to participate were 30.8 percent.[a] Respondents who initially refused to participate because the interviewer's call reached them at a bad time were called back on another day and were invited to participate. The overall response rate was 57 percent (see Appendix B). This response rate is comparable to RDD surveys of other sensitive topics in Washington State.[39]

The study had 90% power to be able to reject the null hypothesis of no age difference in maximum WTP (at one-sided α 0.10, with a coefficient of variation 0.975 and Δ difference in $X_{younger}$ and X_{older} WTP 0.159).[40]

Human Subjects

The study, approach and consent script, and final questionnaire were approved by the University of Washington's Human Subjects Department. Please see Appendix A for instrument wording.

Analysis and Validity Checks

Statistical comparisons of categorical variable proportions used Pearson's chi-square test and Student's *t*-test for continuous variables. Unit framing was assessed using the nonparametric sign test. Significance was set at two-tailed alpha 0.05.

[a] Total does not add to 100 due to $n = 1$ eligible respondent who was unreachable to complete the survey.

Multivariate logistic regression evaluated the independent association of respondent characteristics with the dependent outcome of answering 'yes' to the contraceptive insurance coverage referendum question (Question 1).

Bivariate and multivariate associations between main effect variables and the dependent 'mean WTP' outcome were tested using tobit regression. Tobit regression is a hybrid of probit analysis and ordinary least squares regression[41] that is used with left-censored data, as is the case here where some of the responses are censored at $0 as a given bound.[42] Potential confounding variables were defined as those variables not in the expected causal pathway between predictor variables and the dependent WTP outcome, that were shown to be associated with both of these. Interaction terms between predictors that were deemed *a priori* to be potential effect modifiers included age, gender, income and insurance status. No significant interactions were found. We examined the assumptions of parametric regression including homogeneity of variance and whether the residuals were normally distributed with no trends. Heteroskedasticity was seen (departure from homogeneity of variance in the dependent WTP variable). We used a log transform of the WTP outcome to reduce heteroskedasticity and achieve a more linear residual pattern. Because of the log transform, our analysis is of the relative difference between two WTP figures rather than the absolute difference. Model fit was assessed by checking outliers and influential observations.[43] Both mean and median WTP figures were calculated. We focused on the mean as this is a more accurate measure of the population WTP range, and report the regression results transformed back onto the original scale as a percentage increase in dollar value.

RESULTS

Descriptives

Demographics

Demographic characteristics of the study sample are summarized in Table 1. The age distribution, race/ethnicity, income, educational levels, number of children, and marital/relationship status did not vary between men and women in the study.

Approximately half the sample was of reproductive age, classically defined as 44 years of age or younger. Reflecting statewide demographics, most (84.9%) respondents were white. Respondent median yearly income of $20,000 to 50,000 was similar to statewide levels of around $47,000 median household income in 1998. Education levels reflected statewide patterns: 55 percent with college education versus 62 percent Washington State college enrollment in 1998.[44] Most respondents (74%) had one or more children.

Approximately 13 percent of respondents were retired, and a high proportion were currently unemployed (19%). Female respondents were more likely to be unemployed, or retired (χ^2 p = 0.052), and less likely to be working full time (p = 0.000) compared with men. Among men, 86 percent work 40 or more hours a week and ten percent 20 to 39 hours a week; the corresponding proportions among women were 53 and 29 percent, respectively.

Approximately two-thirds of respondents (63.7%) had employer-based health insurance, either through their own policy or that of their spouse or parent. Women were more likely than men to have health insurance through a spouse (21.9% for women vs. 7.8% for men; χ^2 $p = 0.047$). There was no gender difference in overall private versus public categories of health insurance.

Table 1: Demographic Characteristics of RDD Sample, 2000 (N = 331)

	TOTAL n (%)		TOTAL n (%)
Age in years		**Relationship status**	
15 (8)	24 (7.2)	Legally married	200 (60.4)
25 - 34	60 (18.1)	Living with partner	27 (8.2)
35 - 44	75 (22.7)	Dating not cohabiting	35 (10.6)
45 - 54	83 (25.1)	Widowed	21 (6.3)
55 – 59	20 (6.0)	No main relationship	47 (14.2)
60 – 64	20 (6.0)	**Children**	
65 – 74	26 (7.8)	None	86 (25.9)
>= 75	20 (6.0)	One	50 (15.1)
Race		Two	95 (28.7)
African American	9 (2.7)	Three	46 (13.9)
Asian	7 (2.1)	>= Four	51 (16.3)
White	281 (84.9)	**Insurance Status**	
American Indian	7 (2.1)	Private (employer, spouse, dependent)	249 (75.2)
Native Hawaiian	2 (0.6)	Public - Medicare	39 (11.8)
Hispanic / Latino	11 (3.3)	Public - Medicaid, Basic Health Plan	17 (5.1)
Some other race	13 (3.9)	Something else	12 (3.6)
Education		No insurance	14 (4.2)
<= 8th grade	1 (0.3)	**Employment ***	
Some high school	18 (5.4)	Self-employed	43 (13.0)
High school graduate/GED	79 (23.9)	Working for employer	181 (54.7)
Voc/trade or some college	109 (32.9)	Not working	63 (19.0)
College graduate	74 (22.4)	Retired	44 (13.3)
Some graduate school	24 (7.2)	**Hours Worked ****	
Completed graduate school	25 (7.6)	>= 40 hours/week	156 (47.1)
Yearly income ($)		20 – 39 hours	44 (13.3)
< $10,000	20 (6.0)	< 20 hours	13 (3.9)
$10,000 - $20,000	30 (9.1)		
$20,000 - $50,000	102 (30.8)		
$50,000 - $100,000	100 (30.2)		
$100,000 - $250,000	16 (4.8)		
> $250,000	6 (1.8)		

*χ^2 p = 0.052 **p = 0.000

Contraceptive Use Profile

Around two in three respondents (67.6%) used contraception, and this use level was the same between women and men (χ^2 p = 0.39). Contraceptive use among women of reproductive age (women <45) was 59 percent. The overall use rates are higher than in these age categories because approximately 41 percent of female contraceptive users were 45 years or older.

Table 2 outlines the distribution of method use among women 18 to 44 years old, and among men 18 years and older. As is the case nationally, the most common methods used by women were female sterilization and oral contraceptives, followed by male partner sterilization and male condom use. Of the 91 women who cited a primary contraceptive method, two-thirds (*n* = 57 or 63%) were ages 18 to 44, and fully one-third (*n* = 34 or 37%) were 45 years or older. Older women were more likely to cite sterilization (their own among 16/34 and in their male partner in 9/34), which accounted for three-quarters of method use, compared with women 18 to 44 years old (χ^2 *p* = 0.57). One in four of these older women (9/34) were using reversible methods such as oral contraceptives, IUDs, and condoms.

Table 2: Primary Contraceptive Method Use, Women and Men

	Women 18 – 44		**Women ≥ 45**		**Men ≥ 18**	
	N	(%)	N	(%)	N	(%)
Abstinence	1	(1.8)	1	(2.9)		
Diaphragm	1	(1.8)				
[Female] Condom	1	(1.8)				
[Female] Partner Uses a Method					23	(26.7)
[Female] Sterilization	18	(31.6)	16	(47.1)	12	(14.0)
Deprovera	5	(8.8)				
IUD			2	(5.9)		
[Male] Condom	7	(12.3)	1	(2.9)	21	(24.4)
[Male] Sterilization	11	(19.3)	9	(26.5)	24	(27.9)
[Male] Withdrawal	1	(1.8)				
OCPs	11	(19.3)	2	(5.9)		
Spermicide			1	(2.9)	1	(1.2)
Some Other Method			2	(5.9)	4	(4.6)

*Several individuals also cited a second, and in one case, a 3rd method, use

The types of contraceptive used by women enrolled in health insurance plans that covered contraceptives did not vary significantly from the types used by women in plans that did not cover contraceptives (χ^2 *p* = 0.263). The available numbers may have been too small to have power to detect a difference, however. Slightly over half of all men (53.5%) use a male method of contraception such as male condom, spermicide, and vasectomy. Two out of every five men (41.0%) rely on their female partner to use contraception.

Insurance Status and Contraceptive Benefit Coverage

Most respondents (95.8%) have some form of health insurance coverage. Three-quarters of respondents (75.2%) receive their health insurance through a private/commercial source. The average monthly premium was $98.01 (standard deviation $132.78).

Two-thirds of respondents with health insurance coverage (n = 214/317 or 67.5 %) knew whether or not their insurance covered contraceptives. Excluding those on Medicare since they are over age 65 and unlikely to be using contraception, 23.7 percent of those who knew their plan policy said that their insurance covered contraceptives (Table 3). Assuming that all the plans of non-Medicare individuals who did not know their benefits cover contraceptives yields a 'best case' scenario of 54 percent coverage. Assuming that none of these plans cover contraceptives yields a 'worst case' scenario of 24 percent coverage. Reported contraceptive coverage varies by health insurance source (χ^2 p = 0.032).

Table 3: Insurance Source and Contraceptive Coverage

	Contraceptive Coverage			Row % ('Yes' Coverage by
	Yes (n, %)	**No** (n, %)	**Don't Know** (n, %)	Insurance Source)
Through Employer	33 (49.2)	73 (49.7)	41 (39.8)	22.4 Yes
Through Spouse/partner	16 (23.9)	19 (12.9)	17 (16.5)	30.8
Private Insurance, Self-pay	5 (7.5)	20 (3.6)	13 (12.6)	13.2
Medicare	1 (1.5)	19 (12.9)	19 (18.5)	2.6
Medicaid	1 (1.5)	3 (2.0)	0 (0.0)	25.0
Basic Health Plan	4 (6.0)	3 (2.0)	6 (5.8)	30.8
Dependent/Parent's Employers	5 (7.5)	5 (3.4)	2 (1.9)	41.7
Something Else	2 (3.0)	3 (2.0)	5 (4.8)	0.0
TOTAL	67	147	103	

Out-of-Pocket (OOP) Contraceptive Expenses

Thirty persons indicated that they currently pay for their contraceptives out-of-pocket. Most of these individuals (79.3%) had health insurance. Twice as many women (n = 20) as men paid out-of-pocket. This subgroup is relatively small. The difference in the amount paid by gender was almost statistically significant: men paid more per month than women ($12.70 vs. 9.29 respectively, p = 0.056). Sixteen of these individuals said that they pay $0 per month, perhaps indicating that they are able to get their contraceptive for the amount that the insurer covers; that their sexual partner pays for the method they both use; or that they had paid for one-time surgical sterilization costs. Among all persons who said they paid OOP, the mean was $8.23/month. Of those who indicated that they pay something for their method (i.e., excluding those who said $0), the mean was $15.44/month. The amount paid OOP did not vary by whether the person had insurance or not (p = 0.51).

Method Change Due to Cost Concern

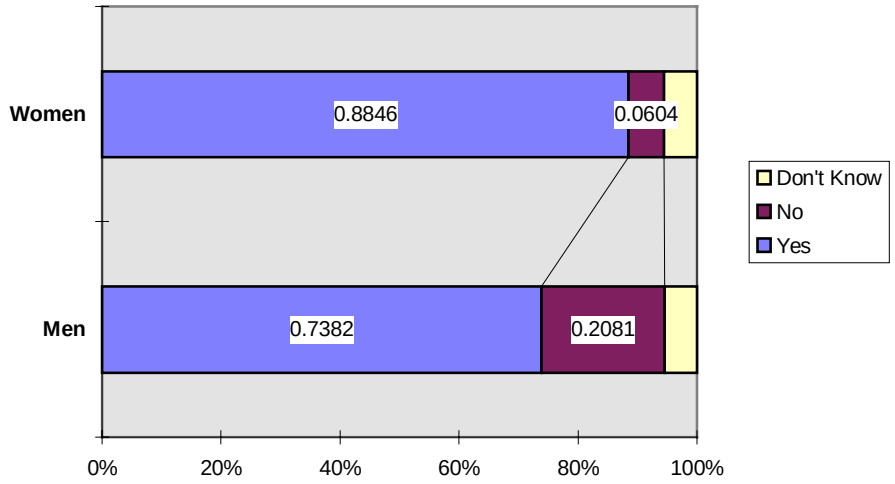
A small number of individuals said that they had changed their contraceptive method or use due to concern over cost (*n* = 19, 5.7%). Taken together with those who said they were unsure, as many as one in fourteen (6.6%) may have changed their method due to cost considerations. The sample size is too small for meaningful comparisons of this subgroup by gender or other characteristics. Persons who had changed methods due to cost were paying more in OOP expenses than those who had not changed: $11.25 vs. $8.23/month, respectively.

Opinion: Should Insurance Plans Cover Contraceptives?

Proportion Supporting Coverage

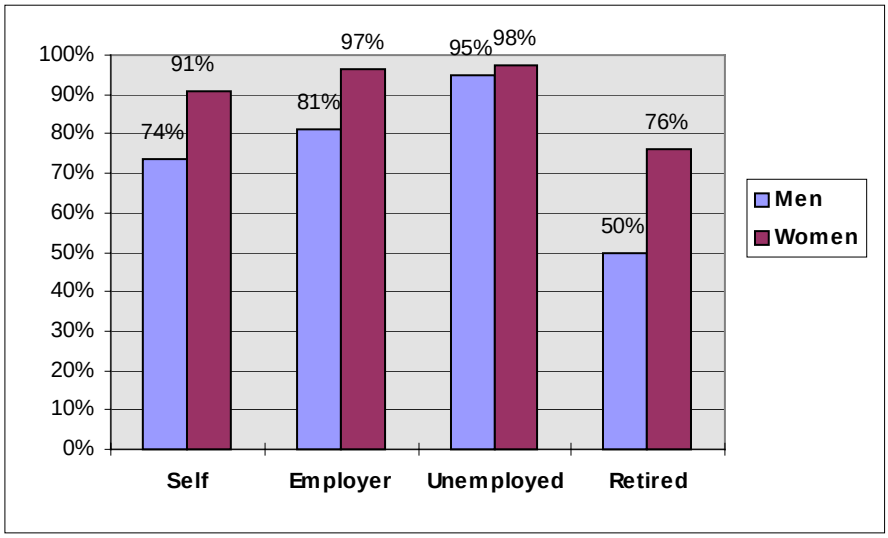
Question 1 asked: "Do you think contraceptives should be covered by health insurance plans?" Three out of four men (*n* = 110/149 or 73.8%) and nine out of ten women (*n* = 161/182 or 88.5%) answered 'yes.' More men (20.8%) than women (6.0%) said 'no.' This difference was statistically significant (*p* = 0.000). Only 5.4 percent of the total sample (*n* = 18) said that they did not know or were undecided. (See Figure 1). Only 13 percent (*n* = 42/313 who answered yes or no) of those who gave an opinion said they do *not* believe plans should offer such a benefit. Of these latter, nine people who said plans should not offer contraceptive coverage nonetheless said that they were willing to pay more than zero dollars for such a benefit. These individuals were excluded from the tobit regression model since their responses appear inconsistent.

Figure 1: Contraceptive Coverage Opinion, by Gender



As Figure 2 shows, there were distinct patterns of opinion by employment status and gender. Among the unemployed there was virtually no gender divide, with nearly all (*n* = 57/59) in support. The 'gender gap' was widest amongst retirees.

Figure 2: Contraceptive Insurance Support, by Employment and Gender



Multivariate Regression Model: Coverage Opinion

Gender, reproductive age, and employment status were found to be independently associated with answering 'yes' to the contraceptive insurance coverage question. The multivariate logistic regression model in Table 4 showed that women were nearly six times more likely to answer 'yes' compared with men (adjusted OR 5.6, 95% CI 2.35-13.38). Younger respondents were more likely to agree with this question, as were the unemployed.

Table 4: Factors Associated with Answering 'Yes' to Contraceptive Coverage

Variable	Odds Ratio*	95% Confidence Interval	p-value
Gender: male	1.00 (referent)		
Gender: female	5.61	2.35 - 13.38	0.000
Reproductive age ≥ 45 f / ≥55 m	1.00 (referent)		
Reproductive age <45 f / <55 m	3.06	1.07 - 8.76	0.037
Employment: employed by other	1.00 (referent)		
Employment: unemployed	8.84	1.05 – 74.48	0.045

*logistic regression model adjusted for repro age (women <45, men < 55), income, employment and insurance status (employer, self, Medicaid/Medicare, uninsured)

Willingness to Pay

Univariate WTP

The unadjusted mean WTP was $8.79 per month (standard deviation $8.58). Yearly WTP was $127.10 (SD $102.70).

Proportion WTP More Than Actuarial Cost

Nearly all (96.4%) respondents were willing to pay more than $23.16 per year, the actuarial annual cost of a contraceptive benefit in year 2000 dollars. Eighty-two percent were WTP more than $1.93 actuarial cost per month.

Bivariate Associations With WTP

Bidding Algorithm Start Point

WTP varied by whether respondents received an initial question starting the bid at two dollars (mean $6.62) versus ten dollars (mean $11.28). This starting point bias persisted in the multivariate regression model (p = 0.003).

Unit Price Framing (Monthly versus Yearly WTP)

Mean WTP per month was $8.79, and slightly more than 12 times this amount for per year WTP: mean $127.10 (rather than $8.79 x 12 = $105.48). However, this difference was not significant in the bivariate or multivariate analysis.

Contraceptive Effectiveness Scenario

People presented with a contraceptive effectiveness rate of "99 percent pregnancy prevention" scenario were willing to pay more than if they were presented with a contraceptive effectiveness rate scenario of "82 percent pregnancy prevention": unadjusted mean WTP of $9.34 per month vs. $8.15, respectively. The median WTP was $10.00 vs. $5.00. The mean yearly WTP also dropped with the lower effectiveness scenario ($133.00 vs. $119.36), but the median yearly WTP did not ($120.00 whether higher or lower effectiveness scenario was presented). The impact of 'effectiveness' on WTP varied by gender. Women's mean WTP did not appear to be affected by scenario, though their median WTP was. This pattern was reversed for men (see below).

Table 5: Contraceptive Effectiveness Scenario Impact on Unadjusted WTP, By Gender

	High' Contraceptive Effectiveness Scenario	**Low' Contraceptive Effectiveness Scenario**
Men	$ WTP	$ WTP
Mean	9.96	7.36
Median	6.00	5.00
Women		
Mean	8.74	8.75
Median	10.00	7.00

'Effectiveness scenario' was nearly significant in the bivariate WTP regression (p = 0.056) and not significant in the final multivariate regression model (p = 0.084).

Multivariate Regression Model: WTP

The final multivariate tobit regression included contraceptive effectiveness scenario, bid start point, gender, reproductive age, and income. Significant variables included start point, gender, and age (Table 6). Holding all else constant, women were willing to pay slightly more (27%) per month than men for a contraceptive insurance benefit. This gender difference exists despite the fact that the majority of respondents are married, and as such, might be expected to share contraceptive decision-making and valuation. As expected, the higher WTP of those of reproductive age likely represents the higher use and option values in this group. The lower WTP of those individuals who refused to state their income may reflect unmeasured factors such as religious or political views rather than an income category *per se*.

Table 6: Factors Independently Associated with Willingness to Pay for a Contraceptive Coverage Benefit

Variable	Coefficient	% Difference in WTP	Standard Error	p-value
Female gender (ref = male)	0.2417	27% higher	0.0728	0.001
Income refused to state (ref = <10k)	-0.4104	34% lower	0.1885	0.029
Age <44 women, <55 men (ref = >45 women, >55 men)	0.2815	33% higher	0.0772	0.000
Bid startpoint (ref = $2)	0.1890	21% higher	0.0694	0.006

* tobit regression model with robust variance estimators, adjusted for gender, income, contraceptive effectiveness scenario, bid starting point, and age

DISCUSSION

This study finds that most respondents had an opinion about a contraceptive health insurance benefit. Eighty-seven percent of those voicing an opinion felt that it should be covered as part of health insurance plans.

Based on this sample's population estimates, it appears that such coverage is more often the exception than the rule, with as few as one out of four, or only up to one out of two, individuals enrolled in plans that cover contraceptives.

Contraceptives are a widely used good, with more than two out of three women and men stating that they currently used one or more methods. It is interesting to note that almost one in five women (18.7%) in the sample were beyond the standard "reproductive potential" age (≥ 45 years of age) and still using contraception. Those older women still using a reversible contraceptive method comprised five percent of all women surveyed.

It has been estimated to cost approximately two dollars per employee per month to add a contraceptive benefit to a health plan. The univariate and multivariate mean WTP among respondents in this study is higher than this amount for all subgroups. This is true even among older, presumably noncontraceptive users, in whom the mean WTP of $3.37 among men and $6.19 among women over age 65 likely measures a social altruism value. There appears to be a 'gender' effect whereby women are willing to pay more than men.

Study Limitations

Some have said that evidence of starting point bias, as was seen here, undermines contingent valuation methodology. Others have pointed out that people's willingness to pay different final amounts based on initial price presented may well reflect what occurs in actual market purchasing decisions. What is arguably more important than the precise point estimate boundaries on a single WTP figure are the patterns evidenced by the data. We see here that on the whole there is a WTP across a variety of subgroups that is higher than the two dollar per member per month actuarial cost.

Study limitations include a sample size that limits precision in the analyses of subgroups. Because we did not ask currently unemployed respondents whether they were actively seeking employment, we are unable to say whether this sample's 19 percent 'currently unemployed' rate represents a higher or lower proportion of unemployment compared with statewide levels (approximately 28% of Washington State's workforce of non-institutionalized civilians ages ≥ 16 years was unemployed in 2000[45]). The proportion of retirees in the survey (13%) was similar to the population estimates statewide (10%).[46]

Strengths include the random digit dial design and population-based sampling. These data reflect neither anecdotes nor ideology, but rather, document a well-defined range of the value placed by Washington State citizens on a contraceptive coverage benefit. The benefit to cost ratio of contraceptive coverage is high, at 4.6

APPENDICES

Appendix A: Survey Instrument

Appendix B: RDD Telephone Call Disposition

Appendix C: Open Ended Question Responses

Appendix A

SURVEY INSTRUMENT

```
Hello, I'm calling from Gilmore Research Group on behalf of the University of
Washington.  We've pulled your phone number randomly from all households in
Washington.  May I please speak with any (man)/(woman) in your household who is
18 years or older?  WHEN SPEAKING TO CORRECT RESPONDENT, RE-READ INTRO AND
VERIFY AGE 18=.
We hoped you could take a few minutes of your valuable time to answer some
questions about a health-related topic that's important to many women and men.
The survey will take about 6 minutes to complete.  Is this an OK time to talk?


                         51  Continue           PRESS CODE @int02
                         02  Arrange call-back
                         03  Respondent too busy
                         04  No answer
                         05  Answering machine
                         06  Busy

                  PRESS F1 TO SCROLL AND SELECT ALL OTHER CODES
                      PRESS F7 FOR IF NEEDED STATEMENTS
```

4: **GENDR**

RECORD GENDER

(1/ 52)

Male 1
Female 2

```
The topic of this survey is contraception.  Currently, about half of the health
insurance plans in Washington State do not pay for contraception.  Proposals
before the State Legislature would require that insurers make contraception a
covered benefit in all health plans.  Contraception means hormonal, surgical,
or barrier methods to prevent pregnancy.  Even if your are a man or not
currently using a contraceptive method yourself, we need your opinion because
a contraceptive health plan benefit would help a wife or partner, a daughter,
niece, or friend of reproductive age.  The results of this survey will be
presented to the State Legislature in the next few months.  The opinions of
this sample of citizens may influence how the contraceptive benefits issue is
debated in Olympia, even though this is not an official vote.
PAUSE BEFORE CONTINUING:  We need to ask some questions that may be sensitive,
such as about contraceptive method use. Your responses are voluntary. You are
free not to answer any questions you do not wish to answer and can stop the
interview at any time. Your responses will be kept strictly anonymous and will
never be linked with your name or address.  Your phone number will NOT be kept
on the completed surveys.  Do you have any questions?
                  51  Continue              60  Refused      PRESS CODE@INT03
       PRESS F7 OR REVIEW PAPER FOR IF NEEDED STATEMENTS.
```

5: **INT03**

screen

(1/ 53)

Continue 51
Refused ..... 60 => /END

6: **INT04**

OK, great. Would you agree to complete the survey?

(1/ 55)

Continue.....51 D
Refused to participate.....62 => /END

```
Before we begin the questions let me tell you some facts to keep in mind.


Fact 1:  If a woman and a man have sex without using any contraceptive method,
that woman has an 85% chance of becoming pregnant over the course of one year.

Fact 2:  We know that some contraceptive methods are 99 percent effective in
preventing pregnancy - that is using them that same woman will have less than
1 percent chance of getting pregnant in a year.

Fact 3:  Contraceptive methods have become safer in the last 20 years, though
some women who use the Pill, for example, may experience side effects such as
headaches and depression.

Fact 4:  There is some evidence that people are more likely to use
contraception when it is a covered benefit than when they have to pay for it
out-of-pocket.

                      1  Continue                      PRESS CODE @qa
```

7: **QA**

RESPONDENTS WHO HEARD "FACT 2=82% EFFECTIVE" VERSION

(1/ 57)

Continue.....1 D => Q1

```
Before we begin the questions let me tell you some facts to keep in mind.


Fact 1:  If a woman and a man have sex without using any contraceptive method,
that woman has an 85% chance of becoming pregnant over the course of one year.

Fact 2:  We know that some contraceptive methods are 82 percent effective in
preventing pregnancy - that is using them that same woman will have less than
12 percent chance of getting pregnant in a year.

Fact 3:  Contraceptive methods have become safer in the last 20 years, though
some women who use the Pill, for example, may experience side effects such as
headaches and depression.

Fact 4:  There is some evidence that people are more likely to use
contraception when it is a covered benefit than when they have to pay for it
out-of-pocket.

                      1  Continue                      PRESS CODE @qb
```

8: **QB**

RESPONDENTS WHO HEARD "FACT 2= 99% EFFECTIVE" VERSION

screen

(1/ 58)

9: **Q1**

The first question is: Do you think that contraceptives should be covered by health insurance plans?

(1/ 59)

Yes 1
No 2
Don't know/Undecided/No opinion.....3
Refused 4

```
As you know, everyone is concerned about the cost of health care these days,
and policymakers only want to support benefits citizens truly value. Therefore,
I would like to ask you for a dollar amount that you would be willing to pay
for the contraceptive benefit that covers all FDA approved methods. In reality,
payment for such a benefit might be in the form of not getting other medical
services or employee benefits.  As you answer this question, please keep in
mind what you pay monthly for other goods and services in your household.

Please answer the question as though you have a health insurance plan that
doesn't have a contraceptive benefit now.  We'd like your opinion even if you
don't use contraceptives yourself, and even if you don't have health insurance
now.

                  1  Continue                      PRESS CODE @q2
```

11: **SET1**

(1/ 61)

Picked for rotation $2 1

12: **SET2**

(1/ 62)

Picked for rotation $10 1

13: **Q2A1**

=> Q2A2 if NOT SET1=1

Please answer the question assuming that YOU would be paying the full premium cost for the benefit, that is, don't assume that an employer would be paying any share of the extra premium for a contraceptive benefit. Would you be willing to pay $2 EACH MONTH in insurance premiums to have the cost of all available contraceptives covered by the health plan.

(1/ 63)

Yes 1
No .....2 => Q2C1
Don't know/Not sure .....3 => Q2C1
Refused .....4 => Q2C1

14: **Q2B1**

Would you be willing to pay $4 EACH MONTH for the contraceptive benefit?

(1/ 64)

Yes	1	=> Q2D
No	2	=> Q2D
Don't know/Not sure	3	=> Q2D
Refused	4	=> Q2D

15: **Q2C1**

Would you be willing to pay $1 EACH MONTH for the contraceptive benefit?

(1/ 65)

Yes	1	=> Q2D
No	2	=> Q2D
Don't know/Not sure	3	=> Q2D
Refused	4	=> Q2D

16: **Q2A2**

Please answer the question assuming that YOU would be paying the full premium cost for the benefit, that is, don't assume that an employer would be paying any share of the extra premium for a contraceptive benefit. Would you be willing to pay $10 EACH MONTH in insurance premiums to have the cost of all available contraceptives covered by the health plan.

(1/ 66)

Yes	1	
No	2	=> Q2C2
Don't know/Not sure	3	=> Q2C2
Refused	4	=> Q2C2

17: **Q2B2**

Would you be willing to pay $20 EACH MONTH for the contraceptive benefit?

(1/ 67)

Yes	1	=> Q2D
No	2	=> Q2D
Don't know/Not sure	3	=> Q2D
Refused	4	=> Q2D

18: **Q2C2**

Would you be willing to pay $5 EACH MONTH for the contraceptive benefit?

(1/ 68)

Yes	1
No	2
Don't know/Not sure	3
Refused	4

```
What is the maximum you would be willing to pay EACH MONTH for the
contraceptive benefit?


PROBE1:  Remember that everyone pays for benefits whether they use them or
         not.  Think of what you would be willing to pay to have this benefit
         in the health plan for ALL people to be covered by ALL methods.
PROBE2:  Be assured that the health plan will negotiate the best rate to
         have all the methods covered.  So please say what you would be
         willing to pay EACH MONTH for everyone to have the benefit.
PROBE3:  Think of what you would actually be willing to spend to get this
         benefit.

            DOLLAR AMOUNT:                                  TYPE NUMBER @q2d
                         00  Nothing/Zero
                         98  Don't know/Not sure
                         99  Refused
```

19: **Q2D**

What is the maximum you would be willing to pay EACH MONTH for the contraceptive benefit? RECORD NUMBER IN WHOLE DOLLARS

(1/ 69)

Nothing/Zero	00	=> Q3
Don't know/Not sure	98	
Refused	99	=> Q3

24: **ADD1**

=> * if AMNT1+AMNT2

Addition only

(1/ 75)

$4	1
$2	2
$1	3
$20	4
$10	5
$5	6

25: **Q2D1**

You said you'd be willing to pay <add1> each month. Would you be willing to pay more than that? IF YES, PROBE: What amount per month?

(1/ 76)

No/Nothing	00
Don't know/Not sure	98
Refused	99

28: **Q2E**

This calculates to $<adda > a YEAR, is that still the maximum amount you would be willing to pay for contraceptive benefits?

(1/ 84)

Yes	1	=> Q3
No	2	
Don't know/Not sure	3	=> Q3
Refused	4	=> Q3

29: **Q2F**

How much would you be willing to pay each year?

(1/ 85)

Don't know/Not sure 9998
Refused 9999

30: **Q3**

=> +1 if NOT Q2D=00

DO NOT READ PROBE TO FIT UP TO 3 RESPONSES PRESS ENTER TO CONTINUE

Why do you say that?

(1/ 89 - 91 - 93)

Religious objections to contraception 01
This benefit should be part of my plan already 02
People should take responsibility for themselves/it's an individual's choice.....03 N
I don't need the benefit .....04 N
Other (SPECIFY:).....97 O
Don't know/Not sure .....98 X
Refused .....99 X

31: **Q5**

Next I have a few questions about yourself. Remember, this survey is completely anonymous and the information you give will be used only for research purposes, to help us better understand people's feeling about a contraceptive insurance benefit. What is your age, please?

(1/ 95)

Refused 99

32: **Q5A**

=> +1 if Q5<>99

READ 1-8

Is that. . .

(1/ 97)

18 to 24 1
25 to 34 2
35 to 44 3
45 to 54 4
55 to 59 5
60 to 64 6
65 to 74 7
Or 75 older.....8
----------.....
Refused 9

33: **AGE**

=> * if	IF ((Q5=99),Q5A, RNG(Q5,18,25,35,45,55,60,65,75))

combined age group

(1/ 98)

18 to 24 1
25 to 34 2
35 to 44 3
45 to 54 4
55 to 59 5
60 to 64 6
65 to 74 7
Or 75 or older 8
Refused 9

34: **Q6**

Are you currently self-employed, are you working for an employer, or not working at this time?

(1/ 99)

Self-employed 1
Working for employer 2
Not working 3
Refused 4

35: **Q6A**

=> +1 if	NOT Q6=1-2

READ 1-3

How many hours a week do you usually work. . .

(1/ 100)

40 or more 1
20 to 39 2
Or less than 20 3
---------- .....
Varies each week 4
Don't know/Not sure 5
Refused 6

36: **Q7**

READ ALL 1-97: PROBE: Any others? UP TO 5 RESPONSES

What is your current health insurance source? IF RESPONDENT MENTIONS HEALTH CARE PLAN, SUCH AS "BLUE CROSS" OR "REGENCE," PROBE IF THAT'S THROUGH AN EMPLOYER

(1/ 101 - 103 - 105 - 107 - 109)

Insurance through your employer	01	
Insurance through your spouse's or partner's employer	02	
Private insurance that you or someone else pays for	03	
Medicare	04	
Medicaid	05	
The Basic Health Plan	06	
Dependent/Parent's employers	07	
Or something else (SPECIFY:)	96	O

Have no insurance source at this time	97	X
Don't know/Not sure	98	X
Refused	99	X

37: **Q7A**

=> +1 if NOT Q7=01-03 07

How much do you pay out-of-pocket for your monthly health insurance premiums?

(1/ 111)

Don't know/Not sure	998
Refused	999

38: **Q7B**

=> +1 if NOT Q7=97

Is this because you choose to pay for contraceptive or other health needs out-of-pocket rather than paying a health insurance premium?

(1/ 114)

Yes	1
No	2
Don't know/Not sure	3
Refused	4

```
Do you or your partner currently use contraception, or do anything including
having had surgical sterilization to prevent pregnancy?

IF NEEDED:  Please let me again assure you that all your responses are
anonymous and will not be linked to you in any way.  We are asking this
question in order to document how much people who use contraceptives but don't
have coverage for it have to pay out-of-pocket which will be our next question,
if you could just bear with use on this question.


                      1  Yes                      PRESS CODE @q8
                      2  No
                      3  Refused
```

39: **Q8**

=> Q9 if	AGE=6-9

Do you or your partner currently use contraception, or do anything to prevent pregnancy? IF NEEDED: Please let me again assure you that all your responses are anonymous and will not be linked to you in any way. We are asking this question in order to document how much people who use contraceptives but don't have coverage for it have to pay out-of-pocket, which will be our next question, if you could just bear with us on this question.

(1/ 115)

Yes	1	
No	2	=> WORD1
Refused	3	=> Q9

40: **Q8A1**

=> +1 if	NOT Q8=1 OR NOT GENDR=2

DO NOT READ PROBE TO FIT UP TO 6 RESPONSES PRESS ENTER TO CONTINUE

What is the current method of contraception that you, yourself, use? PROBE: Anything else?

(1/ 116 - 118 - 120 - 122 - 124 - 126)

Abstinence	01	
Cervical cap	02	
Diaphragm	03	
Emergency contraceptive pill	04	
Female condom	05	
Implants (Norplant)	06	
Injectables (Depo)	07	
IUD	08	
Male partner uses the condom	09	
Male partner is sterilized	10	
Partner used withdrawal ("pulling out")	11	
Pills (OCPs)	12	
Rhythm/Natural family planning	13	
Sponge	14	
Spermicide/Foam	15	
Sterilization	16	
Other (SPECIFY:)	97	O
Don't know/Not sure	98	X
Refused	99	X

41: **Q8A2**

=> +1 if	NOT Q8=1 OR NOT GENDR=1

DO NOT READ PROBE TO FIT UP TO 6 RESPONSES PRESS ENTER TO CONTINUE

(1/ 128 - 130 - 132 - 134 - 136 - 138)

Abstinence	01	
Female partner uses method	02	
Female partner is sterilized	03	
Male condom	04	
Rhythm/Natural family planning	05	
Spermicide	06	
Vasectomy	07	
Withdrawal ("pulling out")	08	
Other (SPECIFY:)	97	O
Don't know/Not sure	98	X
Refused	99	X

42: **WORD1**

=> * if	IF ((GENDR=2),06,05)

set in code only

(1/ 140)

I don't need contraceptives anymore or am beyond the age of pregnancy possibility	01
I don't need contraceptives because my partner already uses something	02
I don't need contraceptives	03
I choose not to use contraceptives	04
I am trying to get pregnant	05
I am trying to get my partner pregnant	06
Or some other reason (SPECIFY:)	97

Don't know/Not sure	98
Refused	99

43: **Q8B**

=> +1 if	NOT Q8=2

READ 1-97

Which of the these statements best explain why. . .

Elimination => 6 (WORD1)

(1/ 142)

I don't need contraceptives anymore or am beyond the age of pregnancy possibility	01	
I don't need contraceptives because my partner already uses something	02	
I don't need contraceptives	03	
I choose not to use contraceptives	04	
I am trying to get pregnant	05	
I am trying to get my partner pregnant	06	
Or some other reason (SPECIFY:)	97	O

Don't know/Not sure	98	X
Refused	99	X

44: **Q9**

=> +1 if	Q7=97

Does your health plan or insurance source cover the cost of contraceptive methods? IF NEEDED: Please answer even if you don't currently use contraceptives.

(1/ 144)

Yes 1
No 2
Don't know/Not sure 3
Refused 4

45: **Q9C**

=> +1 if	Q9=1 3-4 OR Q8=2 OR AGE=6-9 OR Q8B=01

READ 1-97 UP TO 5 RESPONSES PRESS ENTER TO CONTINUE

Which of these explains why. . .

(1/ 145 - 147 - 149 - 151 - 153)

The plan doesn't offer any contraceptive benefit.....01
The plan doesn't cover the particular contraceptive that I need 02
The plan doesn't offer contraceptive coverage as an additional option that can be purchased (as a "rider") 03
The plan offers a contraceptive rider but I choose not to buy it.....04
Or some other reason (SPECIFY:).....97 O
---------- .....
Don't know/Not sure .....98 X
Refused .....99 X

46: **Q9A1**

Have you ever changed your contraceptive method or use because of concern about cost?

(1/ 155)

Yes 1
No 2
Don't know/Not sure 3
Refused 4

47: **Q9A**

How much does the plan cover of contraceptive cost? By COVER we mean NOT the co-pay that your plan may require for any health service, but the overall payment amount the plan covers of the total contraceptive cost. RECORD PERCENT - IF NUMBER RECORD IN OTHER

(1/ 156)

Covers 100%.....100
Covers 80%.....080
Other (SPECIFY:).....997 O
Don't know/Not sure 998
Refused 999

48: **Q9B**

If your insurance sources pay less than 100% for the product, about how much do you pay out-of-pocket for your contraceptive methods per month?

(1/ 159)

Nothing/None/Zero 000
Don't know/Not sure 998
Refused 999

49: **Q9D**

=> +1 if AGE=6-9 OR Q8=2-3 OR Q9=1

About how much do you PAY OF POCKET for your contraceptive methods per month?

(1/ 162)

Don't know/Not sure 998
Refused 999

52: **Q10**

=> +1 if Q8B=01 05-06 OR AGE=6-9

Are you <word2 > trying to get pregnant now, or are you thinking about <word3> getting pregnant sometime in the future?

(1/ 167)

Yes 1
No 2
Currently pregnant 3
Don't know/Not sure 4
Refused 5

53: **WORD4**

=> * if IF ((GENDR=1),1,2)

wording only

(1/ 168)

Latino 1
Latina 2

54: **Q11**

The next few questions are for classification purposes. Are you of Hispanic or <word4 > origin?

(1/ 169)

Yes 1
No 2
Refused 3

55: **Q12**

READ 1-97 UP TO 6 RESPONSES PRESS ENTER TO CONTINUE

I'll read several categories, which of these best describes you. . .

(1/ 170 - 172 - 174 - 176 - 178 - 180)

African American.....01
Asian.....02
White.....03
American Indian.....04
Alaska Native.....05
Native Hawaiian or Pacific Islander.....06
Or something else (SPECIFY:).....97 O
---------- .....
Don't know/Not sure.....98
Refused.....99

56: **WORD5**

=> * if IF ((GENDR=2),98,0)

wording only

(1/ 182)

None.....00
One.....01
Two.....02
Three.....03
Four.....04
Five.....05
Six.....06
Other (SPECIFY:).....97
Don't know/Not sure.....98
Refused.....99

57: **Q13**

How many children have you ever had?

Elimination => 9 ()

(1/ 184)

None.....00
One.....01
Two.....02
Three.....03
Four.....04
Five.....05
Six.....06
Other (SPECIFY:).....97 O
Don't know/Not sure.....98
Refused.....99

58: **Q14**

READ 1-6

What is your current relationship status. . .

(1/ 186)

Legally married 1
Living with partner 2
Dating but not living together 3
Widowed 4
Or no main relation 5
---------- .....
Don't know/Not sure 6
Refused 7

59: **Q15**

PROBE TO FIT

What is the highest grade or year of school you completed?

(1/ 187)

8th grade or less 1
Some high school 2
Completed high school/GED 3
Some college or technical school 4
Completed college 5
Some graduate school 6
Completed graduate school 7
Refused 8

60: **Q16**

What is your zip code?

(1/ 188)

Refused 99999

61: **Q17**

READ 1-6

During the past year, about how much money BEFORE taxes do you estimate your household received from all sources. . .

(1/ 193)

Less than $10,000 1
Between $10,000 and $20,000 2
Between $20,000 and $50,000 3
Between $50,000 and $100,000 4
$100,000 to $250,000 5
Or more than $250,000 6
---------- .....
Don't know/Not sure 7
Refused 8

65: **INT01**

$E

That concludes my questions. If you have any questions you may contact the study director, Ann Kurth, at (206) 685-8431. Thank you very much for completing this survey! We greatly appreciate it.

(1/ 203)

Completed Interview.....01 D => /ATMPT

Appendix B

RDD Telephone Call Disposition, CASRO Formula

	RDD (11/29-12/18/00)
Non Residential calls	**0.20**
Non working	95
Business	58
Non-business data line	34
Unable to determine residential status	**0.16**
Fast busy/slow busy	18
No answer	131
Residential	602
Ineligible	13
Unable to determine eligibility	
Answering machine	75
Language/hearing problem	34
Refusal to provide eligibility	0
Eligible	**480**
Refused interview	141
Refused interview: "soft"/not resolved	7
Refusal rate	0.31
Respondent gone	1
Total agreed to interview/completed surveys	331
Interview rate	0.69
Total known residential	602
Total Residential # screened	493
Screening response [Residential #s screened ÷ known residential #s]	0.82
Overall response [Screening response x Interview rate]	0.57
Total sample used	938
Male	(*n* = 149) 45%
Female	(*n* = 182) 55%

Appendix C

Responses to Open-Ended Questions, RDD Contraceptive Survey

Q3 Why do you say that (you would not be willing to pay anything for the contraceptive benefit)?

- Employers should share the cost of that benefit so they do not know who is planning to have children or not.
- There are other things they need to be covering like ill children and dentistry (especially children).
- Right now I am in transitional housing and I am trying to get my life together and don't have the money.
- You can get it from the clinics free and there are other places you can go.
- I don't think that should be covered by heath insurance plans -- I think health insurance should be used for unanticipated costs, not for routine health care costs.
- I object to people having children who then oppose abortion -- I don't see the role that insurance plays in this because the impulse to have sex is unpredictable.
- I think it would get out of hand for the unwed mothers, high school age children through planned parenthood, I wouldn't want to be a part of abortion.
- If it's not prescribed by a doctor, the cost is an individual's responsibility -- I'm under the impression that most insurance covers contraception methods, prescribed by a doctor anyway (sterilization, pills), the only thing not covered might be male condoms.
- Well basically they are free at any DSHS office. The condoms, and maybe it's the improper use so it is not decreasing the amount of pregnancy in that population that it's available to. It is not the type or amount of availability that the personal self control over a person. It bothers me that young girls can have an abortion or have contraceptives but they can't have a TB shot. There is a recent case or major operation without parental consent.
- Many are not effective and many are possibly not healthy
- Insurance only works under 3 different categories. When the insured event has a positive outcome for the insurer either by statistical means or by virtue of the fact that more dollars are taken in than paid out, insurance has to have an unknown future for the individual, insurance can only work if it is covering an outcome that both the insurer and the insured would prefer to avoid.
- It should be up to the free market to decide which insurance benefits they want to pay for.
- I don't approve of it.
- Because I don't believe in contraceptives.
- I don't believe in them.
- Anything else that I have in my program I have a deductable.

Q7 What is your current health insurance source?

- Have AARP health care options in addition to Medicaid, paying Medicare premiums Part B & Medicaid covers certain prescriptions.
- DSHS coupons.
- Blue Cross, paid by the state.
- Union.
- Healthy Options.
- Through parents, but don't know if they get through an employer or buy directly.
- Healthy Options.
- Through my union.
- I subscribe to Christian Brotherhood, they do not consider themselves an insurance plan, but it's a way of Christians helping each other.
- Student university insurance.
- Plus an employer-related benefit from former employer -- a Medicare supplement "ERB".
- Union.
- Union.
- School insurance and Dutch health insurance.
- Cigna
- Coverage from retired military, spouse
- Indian Health Service
- Champus, Tri-Care
- VA – Veterans Administration
- Through my university.
- Teamsters union
- VA – I'm on 100% disability
- It's just a group insurance that's all
- Champus - we're retired military and we also have mail-handlers insurance - Champus covers 100% contraceptive benefit
- VA
- Military benefits
- Group Health
- Also can receive Tri-Care.
- Tri-Care and United Health

Q8A1 (Females) What is the current method of contraception that you, yourself, use?

- Nothing
- None

Q8A2 (Males) What is the current method of contraception that you, yourself, use?

- None
- Does not use any
- None
- Nothing
- Depo shot
- Nothing
- Nothing
- Nothing

Q8B Which of these statements best explain why (you do not use contraceptives)? Other Reasons

- My wife is pregnant now.
- I don't have insurance.
- My partner is pregnant.
- Respondent is pregnant.
- Currently pregnant and still planning to have more.
- Hysterectomy.
- Abstinence.
- Abstinence.
- Partner is pregnant.
- Use a different method (pullout).
- We're not necessarily trying to get pregnant but we're not trying not to either.
- I prefer the natural method - I know my body and I know when I'm fertile and when I'm not - so we just avoid those days when I'm fertile and I haven't had to use birth control for seven years
- I'm with a woman and this does not apply to me.

Q9C Which of these explains why (your health plan does not cover the cost of contraceptive methods)? Other Reasons

- My insurance doesn't have a prescription rider and my husband's insurance doesn't pay for my form of birth control.
- I presume nothing is covered but don't know for sure.
- Not sure -- but doubt it
- It is not necessary for me; because my husband has a vasectomy and I am monogamous.
- I've just never paid attention to it for what I use.
- Don't need it
- I don't need contraception in this point in my life and never will again.

Q9A How much does the plan cover of contraceptive cost? Other Responses

- 75%
- 85%
- Covers 100% for surgery like vasectomy and all but $15 for methods like the pill.
- With DSHS it’s free.
- 50 percent
- Less than 20 %
- If we mail it in, it's covered 100 percent, but if you want it right now, they cover 20 percent.
- 95%
- Covered all my vasectomy -- except for $10 co-pay -- wife previously used pills and her only cost was a $5 or $10 co- pay at pharmacy.
- 30 percent
- I pay $10 and they cover $20.
- $2 a month
- 85%

Q12 Which of these best describes you…(Something else)?

- Hispanic
- Middle Eastern (from Jordan) -- not really Asian.
- West Indian
- Latino
- Mexican

- Hispanic
- Basque
- East Indian or Asian Indian and Hispanic
- White and American Indian
- Hispanic 100%
- Native American, white and Hispanic
- Racially "American" "Heinz 57" --
- Hispanic
- African American, white and Native American
- Half Asian, half white and Hispanic
- American
- Hispanic
- Mexican American
- Hispanic
- Hispanic
- Mulatto
- Hispanic
- Hispanic
- American
- Spanish
- American
- Hispanic
- Human race

Q13 How many children have you ever had? Other (Specify)

- Twelve.
- Nine
- Seven
- Eight
- Nine
- Seven
- 19 children. Two in America and the rest back home (Africa).
- 11
- Seven
- Nine
- Seven
- 12
- Nine children
- Seven

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